Filed Pursuant to Rule 424(b)(2)
Registration No. 333-174244

Prospectus Supplement

(To Prospectus dated May 23, 2011)

804,290 Shares

Artesian Resources Corporation

Class A Non-Voting Common Stock

We are offering 804,290 shares of our Class A Non-Voting Common Stock at a price of $18.65 per share. Our Class A Non-Voting Common Stock is traded on the NASDAQ Global Select Market under the symbol "ARTNA." On July 14, 2011, the last sale price of our common stock as reported on the NASDAQ Global Select Market was $19.29 per share.

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 5 of the accompanying prospectus.

	Per Share	Total
Public offering price	$ 18.65	$ 15,000,008
Underwriting discount	$ 0.80	$ 643,432
Proceeds, before expenses, to us	$ 17.85	$ 14,356,576

The underwriters may also purchase up to an additional 120,643 shares from us at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus supplement to cover over-allotments.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about July 20, 2011.

Baird

Boenning & Scattergood, Inc. **J. J. B. Hilliard, W.L. Lyons, LLC**

The date of this prospectus supplement is July 14, 2011

About This Prospectus Supplement

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the "SEC," using a "shelf" registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the "prospectus," we are referring to both parts combined.

In this prospectus supplement, the "Company," "we," "us," and "our" and similar terms refer to Artesian Resources Corporation and its subsidiaries on a consolidated basis. References to our "Class A Non-Voting Common Stock" refer to the Class A Non-Voting Common Stock of Artesian Resources Corporation.

This prospectus supplement includes a discussion of special considerations applicable to this particular offering of securities. This prospectus supplement, and the information incorporated herein by reference, may also add, update or change information in the accompanying prospectus. You should read both this prospectus supplement and the accompanying prospectus together with additional information described under the heading "Where You Can Find More Information." If there is any inconsistency between the information in this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in or incorporated by reference to this prospectus supplement and the accompanying prospectus. Neither we nor the underwriters have authorized any other person to provide information different from that contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus supplement, and the accompanying prospectus, is accurate as of the dates on their respective covers, regardless of time of delivery of the prospectus and this prospectus supplement or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since those dates.

All references in this prospectus supplement to our consolidated financial statements include, unless the context indicates otherwise, the related notes.

Cautionary Statement About Forward Looking Information

Statements in this prospectus supplement, in the accompanying prospectus and documents incorporated by reference in this prospectus supplement which express our "belief," "anticipation" or "expectation," as well as other statements which are not historical fact, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1995. Statements regarding our goals, priorities, growth and expansion plans and expectation for our water and wastewater subsidiaries and non-regulated subsidiaries, customer base growth opportunities in Delaware and Cecil County, Maryland, our belief regarding our capacity to provide water services for the foreseeable future to our customers, our belief relating to our compliance and the cost to achieve compliance with relevant governmental regulations, our expectation of the timing of decisions by regulatory authorities, our expectation of the timing of the closing for pending acquisitions, the impact of weather on our operations and the execution of our strategic initiatives, our expectation of the timing for construction on new projects, our belief regarding our reliance on outside engineering firms, our expectation relating to the adoption of recent accounting pronouncements, contract operations opportunities, legal proceedings, our properties, deferred tax assets, adequacy of our available sources of financing, the expected recovery of expenses related to our long-term debt, our expectation to be in compliance with financial covenants in our debt instruments, our ability to refinance our debt as it comes due, the timing and terms of renewals of our lines of credit, plans to increase our wastewater treatment operations, engineering services and other revenue streams less affected by weather, expected future contributions to our postretirement benefit plan, and our liquidity needs are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and involve risks and uncertainties that could cause actual results to differ materially from those projected. Words such as "expects", "anticipates", "intends", "plans", "believes", "seeks", "estimates", "projects", "forecasts", "may", "should", variations of such words and similar expressions are intended to identify such forward-looking statements. Certain factors, such as changes in weather, changes in our contractual obligations, changes in government policies, the timing and results of our rate requests, changes in economic and market conditions generally, and other factors discussed under "Risk Factors" of this prospectus, as well as other factors set forth from time to time in our filings with the SEC, could cause results to differ materially from those in the forward-looking statements.

Forward-looking statements reflect our management's expectations or predictions of future conditions, events or results based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. They are not guarantees of future performance. By their nature, forward-looking statements are subject to risks and uncertainties. Our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements.

These forward-looking statements are representative only as of the date they are made, and we undertake no obligation to update any forward-looking statement as a result of new information, future events or otherwise.

Artesian Consulting Engineers was formed in June 2008 to provide engineering services to developers for residential and commercial development as well as design services for on-site water and wastewater systems and off-site wastewater collection systems. As a result of the decline in new housing and development due to the economic downturn, the need for development and architectural services has remained depressed. Therefore, in April 2011, management decided to reduce staffing levels and reorganize the business. Artesian Consulting Engineers will no longer provide development and architectural services to outside third parties. Artesian Consulting Engineers will continue to work with existing clients on projects already in progress for engineering services until those projects are complete. Artesian will continue to provide design and engineering contract services through our Artesian Utility subsidiary.

In addition to services discussed above, in the years 2005 and 2008, Artesian Resources initiated a Water Service Line Protection Plan, or WSLP Plan, and a Sewer Service Line Protection Plan, or SSLP Plan, respectively. The WSLP Plan covers all parts, material and labor required to repair or replace participating customers' leaking water service lines up to an annual limit. As of March 31, 2011, approximately 15,900, or 23%, of our eligible water customers have signed up for the WSLP Plan. The SSLP Plan covers all parts, material and labor required to repair or replace participating customers' leaking or clogged sewer lines up to an annual limit. As of March 31, 2011, approximately 8,400, or 12.2%, of our eligible customers had signed up for the SSLP Plan.

Our Strategy

Our strategy is to significantly increase customer growth, revenues, earnings and dividends by expanding our water, wastewater and Service Line Protection Plan services across the Delmarva Peninsula. We remain focused on providing superior service to our customers and continuously seeking ways to improve our efficiency and performance. By providing water and wastewater services, we believe we are positioned as the primary resource for developers and communities throughout the Delmarva Peninsula seeking to fill both needs simultaneously.

We have recently acquired high growth, reputable entities which has allowed us to expand our service territories which will serve as a base for future revenue. In these recent acquisitions, we believe we have successfully integrated their operations, infrastructure, technology and employees. We believe this experience presents a strong platform for further expansion and that our success to date also produces positive relationships and credibility with regulators, municipalities, developers and customers in both existing and prospective service areas.

- *Expand our regulated water services*. In our regulated water division, we intend to focus on identifying new and dependable sources of supply, developing the wells, treatment plants and delivery systems to supply water to customers and educating customers on the wise use of water. We intend to focus our expansion in:

    - new regions added to our Delaware service territory over the last ten years, and we believe our customer base in Delaware will continue to grow as Delaware offers a combination of generally lower living costs, availability of development sites, availability of attractive financing rates for construction and mortgage and lower property and income tax rates; and

    - Maryland counties on the Delmarva Peninsula, where we plan to expand our regulated water service area in the Cecil County designated growth corridor, and to expand our business through the design, construction, operation, management and acquisition of additional water systems.

- *Expand our regulated wastewater services*. In our regulated wastewater division, we foresee significant growth opportunities and will continue to seek strategic partnerships and relationships with developers and municipalities to complement existing agreements for the provision of wastewater service on the Delmarva Peninsula.

Summary Financial Data

In the table below, we provide you with certain summary financial information. We have derived the statement of operations data from each of the years in the three-year period ended December 31, 2010 and the balance sheet data as of December 31, 2010 and 2009 from our audited consolidated financial statements incorporated by reference in this prospectus supplement. We have derived the statement of operations data for the three months ended March 31, 2011 and 2010 and the balance sheet data as of March 31, 2011 and March 31, 2010 from our unaudited consolidated financial statements incorporated by reference in this prospectus supplement. You should read this summary information with the discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes to those financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2010 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2011, filed with the SEC and incorporated by reference in this prospectus supplement and the accompanying prospectus.

	Three Months Ended March 31,		Year Ended December 31,		
(In thousands, except per share amounts)	2011	2010	2010	2009	2008
	(Unaudited)				
Statement of Operations Data					
Water sales	$ 12,916	$ 12,895	$ 56,685	$ 53,871	$ 50,101
Total operating revenues	14,757	14,983	64,885	60,912	56,185
Total operating expenses	12,538	12,196	50,617	47,267	44,279
Operating income	2,219	2,787	14,268	13,645	11,906
Interest charges	1,842	1,795	7,295	7,218	6,613
Net income applicable to common stock	1,009	1,646	7,620	7,262	6,418
Net income per share of common stock					
Basic	$ 0.13	$ 0.22	$ 1.01	$ 0.97	$ 0.87
Diluted	0.13	0.22	1.00	0.97	0.86
Average common shares outstanding					
Basic	7,651	7,513	7,557	7,454	7,353
Diluted	7,699	7,583	7,618	7,512	7,427
Cash dividends per share of common stock	$ 0.19	$ 0.19	$ 0.75	$ 0.72	$ 0.71

	As of March 31,		As of December 31,	
(In thousands, except per share amounts)	2011	2010	2010	2009
	(Unaudited)			
Balance Sheet Data				
Utility plant, at original cost less accumulated depreciation	$ 346,251	$ 327,617	$ 345,383	$ 326,899
Total assets	370,299	358,182	371,529	358,895
Lines of credit	25,306	23,708	29,071	25,123
Long-term debt, including current portions	108,572	107,275	106,606	107,555
Stockholders' equity	95,204	91,593	95,146	91,174

Use of Proceeds

We estimate that our net proceeds from the sale of our Class A Non-Voting Common Stock in this offering will be approximately $14,106,576 million, after deducting underwriting discounts and commissions and estimated offering expenses. If the underwriters exercise their option to purchase 120,643 additional shares to cover over-allotments, we estimate that our net proceeds from the sale of our Class A Non-Voting Common Stock in this offering will be approximately $16,260,054 million, after deducting underwriting discounts and commissions and estimated offering expenses.

We will retain broad discretion in the application of the net proceeds of this offering. We currently intend to use the entire net proceeds to fund a paid-in capital contribution in the same amount to Artesian Water. Artesian Water intends to use the paid-in capital contribution to repay short-term borrowings (including borrowings incurred under our line of credit with Citizens Bank that is available to all of our subsidiaries) incurred primarily to finance expenses associated with its construction program, including investment in utility plant and equipment, and to fund capital expenditures and other general corporate purposes. These proceeds are expected to reduce Artesian Water's debt to total capitalization ratio, which we believe will improve Artesian Water's ability to issue additional long-term debt to finance future capital investments. In addition, Artesian may utilize proceeds from this shelf issuance to adjust capitalization ratios in its other regulated subsidiaries.

At March 31, 2011, Artesian Resources had a $40 million line of credit with Citizens Bank, or Citizens, which is available to all subsidiaries of Artesian Resources. As of March 31, 2011, there was $17.7 million of available funds under this line of credit. The interest rate for borrowings under this line is based on the London Interbank Offered Rate, or LIBOR. This is a demand line of credit and therefore the financial institution may demand payment for any outstanding amounts at any time. The term of this line of credit expires on the earlier of January 18, 2012 or any date on which Citizens demands payment.

At March 31, 2011, Artesian Water had a $20 million line of credit with CoBank, ACB, or CoBank, that allows for the financing of operations for Artesian Water, with up to $10 million of this line available for the operations of Artesian Water Maryland. As of March 31, 2011, there was $17.0 million of available funds under this line of credit. The interest rate for borrowings under this line is LIBOR plus 1.50%. The term of this line of credit expires on January 17, 2012.

The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as identification of appropriate acquisition opportunities. Accordingly, we will have broad discretion to use the proceeds as we see fit. Pending such uses, we intend to invest the net proceeds in interest-bearing, investment grade securities.

Price Range of Common Stock and Dividend Policy

Our Class A Non-Voting Common Stock is listed on the NASDAQ Global Select Market and trades under the symbol "ARTNA." On July 13, 2011, there were 786 holders of record of the Class A Non-Voting Common Stock. The following table sets forth, for the periods indicated, the high and low closing sale prices for the Class A Non-Voting Common Stock on the NASDAQ Global Select Market and the cash dividends declared per share. The last reported sales price of our Class A Non-Voting Common Stock on the NASDAQ Global Select Market on July 14, 2011 was $19.29 per share.

	High	Low	Dividend Per Share
2011			
First Quarter	$ 19.91	$ 18.73	$ 0.1892
Second Quarter	19.74	17.86	0.1902
Third Quarter (through July 14, 2011)	19.49	18.17	
2010			
First Quarter	$ 18.62	$ 17.05	$ 0.1873
Second Quarter	19.33	16.61	0.1882
Third Quarter	19.07	17.31	0.1882
Fourth Quarter	19.50	18.53	0.1892
2009			
First Quarter	$ 16.19	$ 12.95	$ 0.1784
Second Quarter	16.44	13.90	0.1784
Third Quarter	17.83	16.06	0.1784
Fourth Quarter	18.61	15.65	0.1873

Our Class B Common Stock, which has voting power, is quoted on the OTC Bulletin Board under the symbol "ARTNB." There has been a limited and sporadic public trading market for the Class B Common Stock. As of July 14, 2011, the last reported trade of the Class B Common Stock on the OTC Bulletin Board was at a price of $18.10 per share on May 5, 2011. As of July 13, 2011, we had 172 holders of record of the Class B Common Stock. The Class B shares are paid the same dividend as the Class A Non-Voting Common Stock noted in the table above.

The underwriting fee will be an amount equal to the offering price per share to the public of the Class A Non-Voting Common Stock, less the amount paid by the underwriters to us per share of Class A Non-Voting Common Stock. The underwriters' compensation was determined through arms' length negotiations between us and the underwriters.

We estimate the expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $250,000. Expenses include the SEC filing fees, FINRA filing fees, NASDAQ Global Select Market listing fees, printing, legal, accounting and transfer agent and registrar fees, and other miscellaneous fees and expenses.

NASDAQ Global Select Market Listing

Our Class A Non-Voting Common Stock is listed on the NASDAQ Global Select Market under the symbol "ARTNA." We cannot assure you that prices at which our shares trade in the public market after this offering will not be lower than the public offering price.

Lock-Up Agreements

We have agreed not to issue, we and our directors, executive officers and a stockholder have agreed not to offer, sell, transfer, pledge, contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, and we have agreed not to file with the SEC a registration statement relating to, any shares of our Class A Non-Voting Common Stock or securities convertible into or exchangeable or exercisable for any of shares of our Class A Non-Voting Common Stock, or publicly announcing an intention to effect any of the foregoing transactions, without the prior written consent of Robert W. Baird & Co. Incorporated for a period of 90 days after the date of this prospectus, except that these restrictions will not apply to our ability to (i) sell the shares offered in this offering, (ii) grant employee or director equity incentive awards under the terms of our equity incentive plans and our defined contribution 401(k) Salary Reduction Plan in effect on the date of this prospectus, (iii) issue our Class A Non-Voting Common Stock upon any exercise of options, restricted stock or other stock-based awards, or (iv) issue of shares of Class A Non-Voting Common Stock under our dividend reinvestment plan. The restrictions will also not apply to transfers by our directors, executive officers and certain stockholder by gift, will or intestacy, or distribution to their limited partners or equity partners, so long as the transferee agrees to be bound by substantially the same lock-up agreement. The restrictions will also not apply to transactions relating to sales of our Class A Non-Voting Common Stock or other securities acquired in the open market after this offering.

Indemnity

We have agreed to indemnify the underwriters, their affiliates and person who control the underwriters against liabilities under the Securities Act or to contribute to payments that an underwriter may be required to make in that respect.

Stabilization

The underwriters may engage in over-allotment transactions, stabilizing transactions and syndicate covering transactions in accordance with Regulation M under the Exchange Act.

- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position.
- Stabilizing transactions permit bids to purchase shares of our Class A Non-Voting Common Stock so long as the stabilizing bids do not exceed a specified maximum.
- Syndicate covering transactions involve purchases of our Class A Non-Voting Common Stock in the open market after the distribution has been completed to cover syndicate short positions.

These stabilizing transactions and syndicate covering transactions may cause the price of our Class A Non-Voting Common Stock to be higher than the price that might otherwise exist in the open market. These transactions may be effected on the NASDAQ Global Select Market or otherwise and, if commenced, may be discontinued at any time.

The underwriters and their affiliates may provide in the future, advisory and investment banking services to us, for which they would receive customary compensation.

- Our Annual Report on Form 10-K for the year ended December 31, 2010, as filed with the SEC on March 15, 2011;
- Our Quarterly Report on Form 10-Q for the period ended March 31, 2011, as filed with the SEC on May 9, 2011;
- Our Current Reports on Form 8-K filed with the SEC on January 21, 2011, April 15, 2011, May 18, 2011 June 22, 2011; and
- The description of our Class A Non-Voting Common Stock contained in our Registration Statement on Form 10, as amended (File No. 000-18516), filed with the Commission on April 30, 1990 to register our Class A Non-Voting Common Stock under the Exchange Act, including any amendments or reports filed for the purpose of updating such description.

Information in this prospectus supplement supersedes related information in the documents listed above, and information in subsequently filed documents supersedes related information in both the prospectus and the incorporated documents.

We will promptly provide, without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference in the prospectus, other than exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents. Requests should be directed to:

Corporate Secretary
Artesian Resources Corporation
Attention: Investor Relations
664 Churchmans Road
Newark, DE 19702
(302) 453-6900

You can also find these filings on our website at www.artesianwater.com. We are not incorporating the information on our website other than these filings into this prospectus.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a "shelf" registration or continuous offering process. We may from time to time sell Class A Non-Voting Common Stock in one or more offerings up to a total dollar amount of $30,000,000.

Each time we sell these securities, we will provide you with a prospectus supplement containing specific information about the terms of each such sale. This prospectus may not be used to sell any of the securities unless accompanied by a prospectus supplement. The prospectus supplement also may add, update or change information in this prospectus. If there is any inconsistency between the information in the prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement. You should read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information" beginning on page 19 of this prospectus.

The information contained in or incorporated by reference into this prospectus summarizes certain information about Artesian Resources Corporation. It may not contain all of the information that is important to you. To understand this offering fully, you should read carefully the entire prospectus, including "Risk Factors," and the other information incorporated by reference into this prospectus. Unless otherwise indicated or unless the context otherwise requires, all references in this prospectus to "we," "us" "our" and the "Company" or similar references as used herein refer to Artesian Resources and its subsidiaries, including Artesian Water Company, Inc., or Artesian Water, Artesian Water Pennsylvania, Inc., or Artesian Water Pennsylvania, Artesian Water Maryland, Inc., or Artesian Water Maryland, Artesian Wastewater Management, Inc., or Artesian Wastewater, Artesian Wastewater Maryland, Inc., or Artesian Wastewater Maryland, each a regulated public utility, and three non-regulated subsidiaries; Artesian Utility Development, Inc., or Artesian Utility, Artesian Development Corporation, or Artesian Development, and Artesian Consulting Engineers, Inc., or Artesian Consulting Engineers.

You should rely only on the information contained in this prospectus or incorporated by reference with respect to the offering made by this prospectus. We have not authorized anyone else to provide you with different or additional information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus. We may offer to sell, and seek offers to buy these securities only in jurisdictions where offers and sales are permitted. The information contained in or incorporated by reference in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of securities.

CORPORATE INFORMATION

We are a Delaware corporation with our principal executive offices located at 664 Churchmans Road, Newark, Delaware, 19702. Our telephone number is (302) 453-6900 and our website address is www.artesianwater.com. The information on our website is not part of this prospectus. General information about us can be found at this website. We make available free of charge through the Investor Relations section of our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. You may also obtain a free copy of these reports and amendments by contacting Investor Relations at Artesian Resources Corporation, 664 Churchmans Road, Newark, Delaware 19702. We include our website address in this prospectus only as an inactive textural reference and do not intend it to be an active link to our website.

We are subject to risks associated with the collection, treatment and disposal of wastewater.

Wastewater collection, treatment and disposal involve various unique risks. If collection or treatment systems fail, overflow, or do not operate properly, untreated wastewater or other contaminants could spill onto nearby properties or into nearby streams and rivers, causing damage to persons or property, injury to aquatic life and economic damages, which may not be recoverable in fees. This risk is most acute during periods of substantial rainfall or flooding, which are common causes of sewer overflow and system failure. Liabilities resulting from such damages and injuries could materially and adversely affect the Company's results of operations and financial condition.

Turnover in our management team could have an adverse impact on our business or the financial market's perception of our ability to continue to grow.

Our success depends significantly on the continued contribution of our management team both individually and collectively. The loss of the services of any member of our management team or the inability to hire and retain experienced management personnel could harm our operating results.

We face competition from other water and wastewater utilities for the acquisition of new exclusive service territories.

Water and wastewater utilities competitively pursue the right to exclusively serve territories in Delaware and Maryland by entering into agreements with landowners, developers or municipalities and, under current law, then applying to the DEPSC or the MDPSC for a Certificate of Public Convenience and Necessity, or CPCN, which grants a water or wastewater utility the exclusive right to serve all existing and new customers of a water or wastewater utility within a designated area. Typically, water and wastewater utilities enter into agreements with developers who have approval from county governments with respect to proposed subdivisions or developments. Once a CPCN is granted to a water or wastewater utility, generally it may not be suspended or terminated unless the DEPSC or MDPSC determines in accordance with its rules and regulations that good cause exists for any such suspension or termination. Therefore, we face competition from other water and wastewater utilities as we pursue the right to exclusively serve territories. If we are unable to enter into agreements with landowners, developers or municipalities and secure CPCNs for the right to exclusively serve territories in Delaware or Maryland, our ability to expand may be significantly impeded.

We depend on the availability of capital for expansion, construction and maintenance. Weaknesses in capital and credit markets may limit our access to capital.

Our ability to continue our expansion efforts and fund our utility construction and maintenance program depends on the availability of adequate capital. There is no guarantee that we will be able to obtain sufficient capital in the future on favorable terms and conditions for expansion, construction and maintenance. Recent economic conditions and disruptions have caused substantial volatility in capital markets, including credit markets and the banking industry and have increased the cost and significantly reduced the availability of credit from financing sources, which may continue or worsen in the future. In the event our lines of credit are not extended or we are unable to refinance our first mortgage bonds when due and the borrowings are called for payment, we will have to seek alternative financing sources, although there can be no assurance that these alternative financing sources will be available on terms acceptable to us. In the event we are unable to obtain sufficient capital, our expansion efforts could be curtailed, which may affect our growth and may affect our future results of operations.

General economic conditions may materially and adversely affect our financial condition and results of operations.

The continuing effects of adverse U.S. economic conditions may lead to a number of impacts on our business that may materially and adversely affect our financial condition and results of operations. Such impacts may include a reduction in discretionary and recreational water use by our residential water customers, particularly during the summer months; a decline in usage by industrial and commercial customers as a result of decreased business activity and commerce in our customers' businesses; an increased incidence of customers' inability, bankruptcy or delay in paying their bills which may lead to higher bad debt expense and reduced cash flow; and a lower natural customer growth rate may result as compared to what had been experienced before the economic downturn due to a decline in new housing starts and a possible slight decline in the number of active customers due to housing vacancies or abandonments.

Any future acquisitions we undertake or other actions to further grow our water and wastewater business may involve risks.

An element of our growth strategy is the acquisition and integration of water and wastewater systems in order to broaden our current service areas, and move into new ones. It is our intent, when practical, to integrate any businesses we acquire with our existing operations. The negotiation of potential acquisitions as well as the integration of acquired businesses

Contamination of our water supply may result in disruption in our services and could lead to litigation that may adversely affect our business, operating results and financial condition.

Our water supplies are subject to contamination from naturally-occurring compounds as well as pollution resulting from man-made sources. Even though we monitor the quality of water on an on-going basis, any possible contamination due to factors beyond our control could interrupt the use of our water supply until we are able to substitute it from an uncontaminated water source. Additionally, treating the contaminated water source could involve significant costs and could adversely affect our business. We could also be held liable for consequences arising out of human or environmental exposure to hazardous substances, if found, in our water supply. This could adversely affect our business, results of operations and financial condition.

Potential terrorist attacks may disrupt our operations and adversely affect our business, operating results and financial condition.

We have taken steps to increase security measures at our facilities and heighten employee awareness of threats to our water supply. We also have tightened our security measures regarding delivery and handling of certain chemicals used in our business. We have and will continue to bear any increase in costs for security precautions to protect our facilities, operations and supplies, most of which have been recoverable under state regulatory policies. While the costs of increases in security, including capital expenditures, may be significant, we expect these costs to continue to be recoverable in water and wastewater rates. Despite our security measures, we may not be in a position to control the outcome of terrorist events, or other attacks on our water systems, should they occur.

Risks Related to Our Common Stock

Our principal stockholders have significant control over the outcome of most fundamental corporate matters.

As of May 12, 2011, members of the Taylor family, which include Dian C. Taylor, our Chair of the Board, Chief Executive Officer and President, Nicholle R. Taylor, Vice President and Director, and John R. Eisenbrey, Jr., Director, beneficially owned 55.0% of the outstanding Class B Common Stock and 2.2% of the outstanding Class A Non-Voting Common Stock and our directors and executive officers as a group beneficially owned 55.2% of the outstanding Class B Common Stock and 3.9% of the outstanding Class A Non-Voting Common Stock. The holders of Class B Common Stock generally have the exclusive right to vote on most fundamental corporate decisions, including the election of our board of directors. As a result, these principal stockholders will have significant control over the outcome of most fundamental corporate matters. If you purchase shares of Class A Non-Voting Common Stock, you will not be able to vote on most fundamental corporate matters, including the election of our board of directors.

Our ability to pay dividends is limited by our Restated Certificate of Incorporation, terms of our preferred stock and covenants in our debt instruments.

Our Restated Certificate of Incorporation requires that we pay or set aside for payment all accrued dividends and sinking fund payments payable on any outstanding preferred stock before we can pay dividends on our common stock. In addition, we have outstanding debt instruments containing covenants restricting our ability to pay dividends on our common stock.

There are a number of other factors that determine both our ability to pay divideuds on our common stock and the amount of those dividends. These factors include:

- Dilutive issuance of our equity securities;
- Certain limitations on dividend payments in our bond covenants included in our trust indentures;
- Our earnings, capital requirements and financial condition; and
- Other factors, including the timeliness and adequacy of rate increases granted to Artesian Water.

We cannot guarantee that we will continue to pay dividends on our common stock in the future or in amounts similar to past dividends.

There is a limited trading market for our Class A Non-Voting Common Stock. You may not be able to resell your shares at or above the price you pay for them.

Although our Class A Common Stock, is listed for trading on the NASDAQ Global Select Market, the trading in our Class A Non-Voting Common Stock has substantially less liquidity than many other companies quoted on the NASDAQ Global

USE OF PROCEEDS

We will receive all of the net proceeds from the sale of our securities registered under the registration statement of which this prospectus is a part.

Unless the applicable prospectus supplement states otherwise, we will retain broad discretion in the application of the net proceeds of this offering. We currently intend to use the entire net proceeds to fund a paid-in capital contribution in the same amount to Artesian Water. Artesian Water intends to use the paid-in capital contribution to repay short-term borrowings incurred primarily to finance expenses associated with its construction program, including investment in utility plant and equipment, and to fund capital expenditures and other general corporate purposes. These proceeds are expected to reduce Artesian Water's debt to total capitalization ratio, which we believe will improve Artesian Water's ability to issue additional long-term debt to finance future capital investments. In addition, Artesian may utilize proceeds from this shelf issuance to adjust capitalization ratios in its other regulated subsidiaries.

At March 31, 2011, Artesian Resources had a $40 million line of credit with Citizens Bank, or Citizens, which is available to all subsidiaries of Artesian Resources. As of March 31, 2011, there was $17.7 million of available funds under this line of credit. The interest rate for borrowings under this line is based on the London Interbank Offered Rate, or LIBOR. This is a demand line of credit and therefore the financial institution may demand payment for any outstanding amounts at any time. The term of this line of credit expires on the earlier of January 18, 2012 or any date on which Citizens demands payment.

At March 31, 2011, Artesian Water had a $20 million line of credit with CoBank, ACB, or CoBank, that allows for the financing of operations for Artesian Water, with up to $10 million of this line available for the operations of Artesian Water Maryland. As of March 31, 2011, there was $17.0 million of available funds under this line of credit. The interest rate for borrowings under this line is LIBOR plus 1.50%. The term of this line of credit expires on January 17, 2012.

We have not determined the amount of net proceeds to be used for each of the purposes indicated. The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as identification of appropriate acquisition opportunities. Accordingly, we will have broad discretion to use the proceeds as we see fit. Pending such uses, we intend to invest the net proceeds in interest-bearing, investment grade securities.

Other Rights

There are no preemptive, conversion, subscription, redemption or sinking fund rights applicable to the Class A Non-Voting Common Stock.

All outstanding shares of our Class A Non-Voting Common Stock are fully paid and non-assessable.

Class B Common Stock

Voting Rights

Except as otherwise described in this "Description of Capital Stock" with respect to our other classes of stock, the right to vote for the election of directors and other stockholder matters is exercised exclusively by the holders of Class B Common Stock. Holders of Class B Common Stock are entitled to one vote per share on all matters voted upon by stockholders. Our directors, other than those elected by holders of our Preferred Stock under specified circumstances as described herein, are classified into three classes. Holders of shares of Class B Common Stock do not have cumulative voting rights.

Dividends

Subject to dividends that we may be required to pay on outstanding shares of Preferred Stock before we may pay dividends on other shares, the holders of Class B Common Stock are entitled to receive dividends, as, when and if declared from time to time by our board of directors out of funds legally available for such purpose. Our Restated Certificate of Incorporation requires that we declare and pay the same dividend per share on the Class B Common Stock and on the Class A Non-Voting Common Stock.

Liquidation Rights

In the event of our liquidation, dissolution or winding up of our operations, the holders of Class B Common Stock are entitled to share pro rata with the holders of Class A Non-Voting Common Stock in all assets and funds remaining after we pay all of our creditors and make required distributions to the holders of outstanding shares of Preferred Stock pursuant to our Restated Certificate of Incorporation.

Other Rights

There are no preemptive, conversion, subscription, redemption or sinking fund rights applicable to the Class B Common Stock.

All outstanding shares of Class B Common Stock are fully paid and non-assessable.

Preferred Stock

As of May 12, 2011, there were no shares of Preferred Stock outstanding. In addition, we have no present plans to issue any Preferred Stock.

7% Prior Preferred Stock

Voting Rights

Under our Restated Certificate of Incorporation, holders of 7% Prior Preferred Stock do not have voting rights except for statutory voting rights as described above.

Redemption

The 7% Prior Preferred Stock is redeemable at our option, in whole or in part, from time to time, upon at least 30 days' notice, at $30 per share plus accrued but unpaid dividends; provided that if we are in default on any dividend or sinking fund payment on any series of Cumulative Prior Preferred Stock, we may not redeem any shares of 7% Prior Preferred Stock or any series of Cumulative Prior Preferred Stock.

In addition, the approval of at least 75% of the total number of shares of Cumulative Prior Preferred Stock then outstanding is required for us to:

- incur any long-term indebtedness that would result in total long-term indebtedness exceeding 65% of our capitalization (as defined in our Restated Certificate of Incorporation);
- create or authorize any class of stock or any obligation or security convertible into shares of stock unless such stock ranks junior to the Cumulative Prior Preferred Stock with respect both to the payment of dividends and distributions upon our liquidation, dissolution or winding up of operations;
- amend, alter, change or repeal any of the provisions of our Restated Certificate of Incorporation with respect to our business purposes so as to substantially change such purposes, or amend, alter, change or repeal any of the terms of the Cumulative Prior Preferred Stock then outstanding in a manner prejudicial to the holders of such stock; provided that if only a particular series of Cumulative Prior Preferred Stock is prejudiced by such changes, then only the vote of 75% of the total number of outstanding shares of such series will be required;
- merge or consolidate if, among other things, the purposes of the resulting corporation would be substantially different from ours or if any adverse change in the terms and provisions of the Cumulative Prior Preferred Stock would result;
- reissue any previously purchased, redeemed or retired shares of Cumulative Prior Preferred Stock; or
- issue any shares of Cumulative Prior Preferred Stock or any stock ranking senior to, or on a parity with, the Cumulative Prior Preferred Stock with respect to dividend rights or liquidation rights, unless certain financial tests specified in our Restated Certificate of Incorporation are met.

In addition, the approval of at least a majority of the total number of shares of Cumulative Prior Preferred Stock then outstanding is required for us to increase the total number of authorized shares of Cumulative Prior Preferred Stock of all series to over 80,000 shares.

Redemption

Our Board of Directors may determine that the whole or any part of any series of the Cumulative Prior Preferred Stock may be redeemed, at any time or from time to time, by paying in cash the redemption price plus accrued but unpaid dividends, and by following the procedures as set forth in Section 4.11 of our Restated Certificate of Incorporation; provided that if we are in default on any dividend or sinking fund payment on any series of Cumulative Prior Preferred Stock, we may not redeem any series of Cumulative Prior Preferred Stock or any shares of 7% Prior Preferred Stock. Subject to the limitations set forth in our Restated Certificate of Incorporation, our board of directors has full power and authority to determine the manner and the terms and conditions of such redemption. If a particular series of the Cumulative Prior Preferred Stock has a sinking fund, the redemption price must not be in excess of the sinking fund redemption price.

Sinking Fund

With respect to all series of Cumulative Prior Preferred Stock for which a sinking fund requirement must be met in each year, we are required to set aside on or before February 1 of such year cash required for sinking fund payments in such year. To the extent that the terms of any series permit the sinking fund requirement for such series to be met by the surrender of stock, the aggregate par value of the shares surrendered for such purpose will be considered as equivalent in amount to cash set aside for such series. The sinking fund requirement for each series of the Cumulative Prior Preferred Stock for which a sinking fund has been established will be cumulative, so that if in any year we do not satisfy the sinking fund requirement for such year, the amount of the deficiency will be added to the sinking fund requirement for the next succeeding year. Unless and until we cure all such deficiencies, we may not declare dividends or make other payments on our stock that rank junior to Cumulative Prior Preferred Stock, nor may we purchase, redeem or otherwise acquire for value such junior stock.

Dividends

Holders of our Cumulative Prior Preferred Stock are entitled to receive dividends out of legally available funds when and as declared by our board of directors. The Cumulative Prior Preferred Stock and the 7% Prior Preferred Stock rank equally with respect to the payment of cash dividends. No dividends may be declared and paid on the Series Preferred Stock, Class A Non-Voting Common Stock or Class B Common Stock unless the full cash dividends on the 7% Prior Preferred Stock then outstanding have been paid or set apart for payment.

Provisions with Possible Anti-Takeover Effects

Our Restated Certificate of Incorporation provides that we will be governed by Section 203 of the General Corporation Law of the State of Delaware which prohibits a "business combination" between a corporation and an "interested stockholder" within three years of the stockholder becoming an "interested stockholder." An "interested stockholder" is one who, directly or indirectly, owns 15% or more of the outstanding voting stock of the corporation. A "business combination" includes:

- A merger;
- Consolidation;
- Sale or lease or other disposition of assets having an aggregate value in excess of 10% of either the aggregate fair market value of the consolidated assets of the corporation or the aggregate market value of all the outstanding stock of the corporation; and
- Certain transactions that would increase the interested stockholder's proportionate share ownership in the corporation or which provide the interested stockholder with a financial benefit.

These restrictions do not apply where:

- Prior to such time the Company's board of directors approved the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- Upon consummation of the transaction in which the stockholder became an interested stockholder, the stockholder owns at least 85% of the voting stock outstanding at the commencement of such transaction, excluding, for determining the number of shares outstanding, shares owned by persons who are directors as well as officers and by employee stock plans in which participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- The business combination is approved by the board of directors and the affirmative vote of two-thirds of the outstanding voting stock not owned by the interested stockholder at an annual or special meeting.

The business combinations provisions of Section 203 of the General Corporation Law of the State of Delaware may have the effect of deterring merger proposals, tender offers or other attempts to effect changes in control of us that are not negotiated and approved by our board of directors.

We have adopted certain provisions in our Restated Certificate of Incorporation and By-laws which may have anti-takeover implications. Our Restated Certificate of Incorporation provides that without the affirmative vote of at least 75% of the voting power of all of the then outstanding shares entitled to vote generally in the election of directors, voting together as a class, the provisions in our Restated Certificate of Incorporation and the Bylaws establishing a classified board of directors may not be altered, amended or repealed. In addition, absent approval of our board of directors, our bylaws may only be amended or repealed by the affirmative vote of the holders of at least 75% of the voting power of all of the then-outstanding shares entitled to vote generally in the election of directors, voting together as a single class. These supermajority voting provisions, along with various supermajority voting provisions for certain classes of stock required for certain business combinations and other corporate actions described above, may have an effect of discouraging, delaying or preventing a change of control which may be at a premium above the prevailing market price.

Transfer Agent and Registrar

The Transfer Agent and Registrar for the Class A Non-Voting Common Stock is Registrar and Transfer Company, 10 Commerce Drive, Cranford, NJ 07016.

NASDAQ Global Select Market

Our Class A Non-Voting Common Stock is listed on the NASDAQ Global Select Market under the symbol "ARTNA."

sales made in an amount not greater than the underwriters' over-allotment option to purchase additional shares in any underwritten offering. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing shares in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market, as compared to the price at which they may purchase shares through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the shares that could adversely affect investors who purchase shares in the offering.

- *Penalty bids* – If underwriters purchase shares in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from other underwriters and selling group members who sold those shares as part of the offering.

Similar to other purchase transactions, an underwriter's purchases to cover the syndicate short sales or to stabilize the market price of our Class A Non-Voting Common Stock may have the effect of raising or maintaining the market price of our Class A Non-Voting Common Stock or preventing or mitigating a decline in the market price of our Class A Non-Voting Common Stock. As a result, the price of the shares of our Class A Non-Voting Common Stock may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of shares if it discourages resales of the shares.

If commenced, the underwriters may discontinue any of these activities at any time.

Our Class A Non-Voting Common Stock is quoted on the NASDAQ Global Select Market. One or more underwriters may make a market in our Class A Non-Voting Common Stock, but the underwriters will not be obligated to do so and may discontinue market making at any time without notice. We cannot give any assurance as to liquidity of the trading market for our Class A Non-Voting Common Stock.

Any underwriters who are qualified market makers on the NASDAQ Global Select Market may engage in passive market making transactions in the Class A Non-Voting Common Stock on the NASDAQ Global Select Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of our Class A Non-Voting Common Stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

804,290 Shares of Class A Non-Voting Common Stock

Prospectus Supplement

July 14, 2011

Baird

Boenning & Scattergood, Inc. **J. J. B. Hilliard, W.L. Lyons, LLC**